Abstract

The wireless sensor networks are the networks used for the data collection and also used to sense various physiological parameters like humidity, temperature, atmospheric pressure, etc. The wireless sensors are equipped with limited energy which increases the requirement of energy efficient methods in order to run the WSNs for the longer periods. The data traffic aggregation is the important energy efficiency factor. The data traffic aggregation methods are used to produce the cumulative traffic streams to reduce the routing overheads. In our dissertation, we have proposed an algorithm based on the average values for the sensing networks. The proposed model works in the binary model based average values, where every cluster is connected to the two clusters in the next connectivity level. The cluster heads collect the data from the other nodes in the cluster and calculate the average value which is further forwarded to the next level cluster head towards the sink node. The average value calculated from the gathered data obtained from the CH’s of different levels is forwarded to the sink node. The experimental results give the throughput two times more than previous method and reduction in the value of transmission delay and load.

Index Terms

Computer Science
Wireless

Keywords
Data Aggregation, Wireless Sensor Networks, Clustering.